"On the 24th he had five grains of disulphate of quina, twice a day, with croton oil liniment to the loins.

"On the 7th of August his febrile state had left him, but was succeeded by a bronchial cough which was relieved in a few days; so that on the 9th he began taking the syrup of iodide of iron in half-drachm doses three times a day, continuing to take sugar in large quantities. Under this treatment he went on improving daily; his complexion became of its natural colour; his strength increased, so that he was enabled to walk a mile with the assistance of a walking stick, by the 19th; and by the end of the month he walked to Cricklade, a distance of nearly five miles.

"On the 9th of September he again walked to Cricklade, and appeared quite to have recovered his health and strength, and the next day resumed his work.

"I heard nothing of him again until the 5th of February last, when I was requested to visit him, as it was thought he had a return of his complaint. On seeing him, however, I was happy to find that he was suffering from an attack of rheumatism, having got wet away from home three times the week before, and being unable to change his clothes. This yielded very readily to treatment in a few days, when he resumed his work, and has continued well to the present time."

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26. *Diabetes Mellitus ending in Phthisis.*—Dr. Willett exhibited to the county and city of Cork Med. and Surg. Soc. (April 9, 1862), the kidneys and lungs of a patient, and related the history of the case:—

"The following case, which Dr. Townsend has kindly allowed me to bring under your notice, is a case of diabetes mellitus ending in phthisis, as is commonly the case with this incurable disease:—

"Michael Murphy, aged 24 years, was admitted into the Workhouse Hospital on January 21, 1860. At that time he was passing about three pints of saccharine urine per diem, with a specific gravity of 1025, to 1030. During twelve months from this time, he passed from 8 to 12 pints of the same urine per diem, the mean specific gravity ranging from 1035 to 1040. He was placed under the usual treatment for this disease, viz., brown bread and oleum jecoris aselli, and during its continuance regained health and strength in some measure; but, as soon as discontinued, viz., the brown bread, the sugar again appeared in the urine, and, after a severe struggle with himself, the poor fellow gave up the brown bread from intense disgust, and was allowed his usual meals. The disease from this time, August 20, 1861, gradually decreased, the sugar daily diminishing, as if the disease had exhausted itself. But now as incurable a one set in, viz., phthisis, with its evident signs of night perspirations, cough, hectic, &c. This has gradually increased up to the present time. About two months ago, he coughed up purulent matter, streaked with blood, in large quantities, but with very little fetor attending it. He then became excessively weak and anemic, suffered greatly from dyspnœa, so that, during the last month of his life, he was supported by pillows at his back, night and day; the congested state of one lung, the right, and the emphysematous condition of the left, fully explain this, and he gradually sank till April 17, 1862, cased his sufferings.

"*Post-mortem appearances.*—The body excessively emaciated, not a trace of adipose tissue being visible under the skin, and the muscles of a bluish colour, their normal red colour being entirely lost. The lungs extensively disorganized, that on the right side completely bound down to the pleura and ribs, by very strong adhesions, which, at the apex, I could not separate by my fingers, but was obliged to cut, as you see by specimen; it is quite solid, as also is the entire of this lung. Either from tubercle, or its irritative effect, on cutting it open an immense amount of pus escaped, which I traced to a large vomica or abscess at the apex, and I also found a similar one in the middle of the same lung. I also beg you to observe the intense state of suppuration it is in, nearly approaching to the third stage of pneumonia, by Laennec called gray hepatization; or gray softening, by Andral, having both within and externally a yellowish or grayish colour, and when cut, exuding a yellow, opaque, purulent fluid, turgid somewhat with blood; that on the left side emphysematous. If you observe at the borders, on squeezing it, you will perceive the course of several small bloodvessels, not yet obliterated by the enlarged air-cells, showing that the emphysema was in this case recent. The heart was small, from the reason of the little amount of blood to drive through the body for its nutrition, and also of a pale colour. Liver normal, but rather enlarged. Stomach normal on the outside; on being cut open, full of thick gastric juice, very acid. Kidneys, as here seen, not much enlarged, and only in a very hyperæmic state. Structure tolerably distinct, and showing how very evanescent are the traces of this formidable disease.

"In regarding the prognosis of this disease, I think that we can never look for a successful cure, as, should the saccharine state of the urine cease, or the diabetes be cured, the general tendency is, as asserted by several authors, to pass either into phthisis or morbus Brightii. The tendency to phthisis we can easily imagine, in consequence of the tissues of the lungs being so poorly nourished, and its tendency thus to degenerate into tubercle, and this particularly so should the patient show any tendency to the strumous diathesis; its leading to subsequent atrophy of the kidneys also we may assume, in consequence of their hyperæmic state, which is the first stage of Bright's disease, in consequence of their over-increased function, this hyperæmic state soon leading to obstruction of the renal tubuli by fibrin, the pressure of this on the small capillaries tending to exudation of the albuminous portion of the blood as well as the increased action of the epithelial cells in the tubuli, which, with the pressure of the enlarged capillaries on their outside and loss of cells by desquamation, and entirely filling up the secreting portion, soon passes into fatty degeneration, or the small, contracted, or atrophied kidney. I think it is also very difficult to state whether the suppurative condition, or abscesses in the lungs in this case, arises from tubercle or chronic pneumonia, as, on feeling very carefully over both lungs, I could not trace a single hard substance between my fingers. We rarely see it so entirely consolidated with tubercle excepting in cases of tuberculous infiltration. But, if we argue that such is the case, how do we account for the entire mass of tubercles suppurating *en masse*, at the same time as to the tendency of tubercle to the upper part and pneumonia to the lower lobes, as well as to the arguments deduced for the preferable localities of each on the right or left sides. I find the best authors differing, and, on that account, deduce that we may consider the question as yet *sub judice*. I find that, after searching several books, it agrees with a form of pneumonia called chronic. Under this head I find that abscesses are frequently found; also, in another form of the same, the lung is found compact, and heavy, pitting little or none on pressure, not crepitant, tearing with difficulty, sometimes almost cartilaginous; when cut, exuding a purulent or muco-purulent fluid; the colour dull red, or yellowish-brown or grayish. When distinct lobules are affected, the lung has an irregular, knotty feel; its volume is diminished sometimes. Abscesses exist within the hardened structure, and, in some instances gangrene was observed by Andral."—*Dublin Quart. Journ. Med. Sc.*, Nov. 1862.

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27. *New Means of Distinguishing Diabetic Urine.*—M. PAILLON, of Sainte-Foy-lez-Lyon, has observed that diabetic urine, if allowed to stand for ever so long a time exposed to the air, does not, like ordinary urine, emit any smell of decomposition. A specimen which had been exposed to the air during a fortnight had only become somewhat lighter coloured and a little muddy, but gave out no nauseous odour. This urine was submitted to M. Burin du Buisson for analysis, and he failed to discover any sugar; but, on being told of the length of time which had elapsed since the urine was passed, he examined it again, and readily discovered alcohol, into which the sugar had become transformed. M. Paillon suggests that the absence of odour after long exposure to air would form a useful test of the presence of sugar in urine in cases where the physician might not have chemical reagents at hand.—*London Med. Rev.*, Aug. 1862, from *Gazette des Hôpitaux*, 3 Juillet.

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28. *Production of Carbonate of Ammonia in the Blood in Uræmic Poisoning.*—Dr. ALEX. PETROFF, of Dorpat, has published some very important researches, which go to support the theory of Frerichs. The object of these investigations was chiefly to examine the validity of Oppler's statements